

U.S. Department of Education

**SMALL BUSINESS
INNOVATION RESEARCH
PROGRAM**

Phase I

**PROGRAM ANNOUNCEMENT
GRANT APPLICATION PACKAGE**

CFDA Number: 84.305S

Institute of Education Sciences

Priority 1

Priority 2

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**U.S. DEPARTMENT OF EDUCATION
SMALL BUSINESS INNOVATION RESEARCH (SBIR)
PROGRAM ANNOUNCEMENT FOR FY 2004**

I. PROGRAM OVERVIEW

A. Introduction

The **U.S. Department of Education (ED), Institute of Education Sciences (Institute)** invites small business firms to submit Phase I research applications under this program announcement entitled **Small Business Innovation Research (SBIR)**. Firms with strong research capabilities in educational technologies in any of the priority areas listed within are encouraged to participate. Consultative or other arrangements between such firms and universities or other non-profit organizations are permitted, but the small business must serve as the grantee.¹

The purpose of this program is to stimulate technological innovation in the private sector, strengthen the role of small business in meeting Department of Education research or research and development (R/R&D) needs, increase the commercial application of ED-supported research results, and improve the return on investment from Federally-funded research for economic and social benefits to the Nation.

NOTE: The Institute requires that applications for grants under this SBIR Phase I competition (CFDA 84.305S) be submitted electronically to the following web site:
<https://ies.constellagroup.com/>

B. SBIR Program Description and Award Levels

The three phases of the SBIR program are:

Phase I. -- Phase I is to determine, insofar as possible, the scientific or technical merit and feasibility of ideas submitted under the SBIR program. The application should concentrate on research that will significantly contribute to proving the scientific or technical feasibility of the approach or concept and that would be prerequisite to further ED support in Phase II. Applications are evaluated by panels of expert reviewers based on criteria published in this program announcement. Institute awards are for periods **up to 6 months** in amounts up to **\$100,000**.

For FY 2004, the Institute anticipates making from 30 to 35 grant awards for CFDA number 84.305S.

Phase II. -- Phase II is to expand on the results of and to further pursue the development of Phase I projects. Phase II is the principal research or R&D effort. It requires a more comprehensive application, outlining the effort in detail including the commercial potential. Phase II applicants must be Phase I awardees with approaches that appear sufficiently promising as a result of Phase I. Once again, applications are evaluated based on published criteria by panels of experts.

¹ A note of caution that such arrangements may be permitted as long as they do not affect the small business size, status or eligibility of the prime awardee as provided for in Definitions – “Small Business Concern.”

Awards are for periods **up to 2 years** in amounts up to **\$750,000**.

Phase III. – In Phase III, the small business must use non-SBIR capital to pursue commercial applications of the research or research and development. Also, under Phase III, Federal agencies may award non-SBIR follow-on funding for products or processes that meet the needs of those agencies.

Both Phase I and Phase II awards may include a reasonable profit/fee.

This program announcement solicits applications for Fiscal Year 2004 Phase I grants only.

C. Authorization

P.L. 106-554, the “Small Business Reauthorization Act of 2000 (the “Act”), was enacted on December 21, 2000. The Act requires certain agencies, including the Department of Education, to establish SBIR programs by reserving a statutory percentage of their extramural research and development budgets to be awarded to small business concerns for research or R&D through a uniform, highly competitive, three-phase process. The Act further requires the Small Business Administration (SBA) to issue policy directives for the general conduct of the SBIR programs within the Federal Government.

Note. -- The Small Business Innovation Research Policy Directive Notice was published in the “Federal Register” / Vol. 67, No. 185 / Tuesday, September 24, 2002 / pages 60072 – 60098. It is also available from the Small Business Administration’s SBIR website at:
<http://www.sba.gov/sbir/sbirpolicydirective.html>

The SBIR policy directive guides the information and requirements set forth in this application package.

D. Applicant Eligibility

Each organization submitting an application **must** qualify as a **small business concern** as defined by the SBA **at the time of the award**. The definition of a small business concern is included in “Definitions.”

In addition, the **primary employment of the principal investigator must** be with the small business firm at the time of award and during the conduct of the proposed research. That is, more than one-half of the principal investigator’s working time must be spent with the small business firm during the period of performance. Also, for both Phase I and Phase II the research or R&D work **must** be performed in the United States. “United States” means the 50 states, the territories and possessions of the Federal Government, the Commonwealth of Puerto Rico, the District of Columbia, the Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau.

Joint ventures are permitted, provided that the business entity created qualifies as a small business in accordance with the Small Business Act, 15 U.S.C. 631. For **Phase I**, the proposing firm must perform at least two-thirds of the research and/or analytic effort. Furthermore, the total of all consultant fees, facility leases or usage fees, and other subcontracts or purchase agreements may not exceed one-third of the total funding agreement price.

SBIR Eligibility Checklist

- ☒ For-profit small business concern.
- ☒ At least 51% U.S.-owned and independently operated.
- ☒ Small business located in the U.S.
- ☒ Principal investigator's primary employment with small business during the project.
- ☒ 500 or fewer employees.

Department of Education staff will examine all SBIR grant applications with the above considerations in mind. If it appears that an applicant organization does not meet the eligibility requirements, we will request an evaluation by the SBA. Under circumstances in which eligibility is unclear, we will not make an SBIR award until the SBA provides a determination.

E. Application Limitations

An application must be limited to one priority listed in this program announcement. When an application is relevant to more than one priority, the applicant must decide which priority is most relevant and submit it under that priority only. However, there is no limitation on the number of different applications that an applicant may submit under this competition, even to the same priority. A firm may submit separate applications on different priorities, or different applications on the same priority, but each application should respond to only one priority. Duplicate applications will be returned without review.

F. Key Dates and Award Information

The Department of Education is required under P.L. 106-554 to participate in the Small Business Innovation Research (SBIR) program. The Government's obligation under this award is contingent upon the availability of appropriated funds from which payments are made. The Department is not bound by the estimates given below.

The Department of Education, Institute of Education Sciences expects to make approximately 30 to 35 Phase I grant awards ranging from \$75,000 to \$100,000 in fiscal year 2004. The Department expects to announce awards by mid-July, 2004. The project start date should be before September 30, 2004. Successful applicants have up to 6 months to carry out the proposed Phase I effort.

For planning purposes only, ED anticipates that approximately one-third of the Phase I awardees will receive Phase II awards, depending on the results of the Phase I efforts, applicant evaluations and the availability of funds. Phase II is to further develop ideas explored during Phase I. Specific instructions for the preparation of Phase II applications will be sent to qualifying Phase I awardees near the completion of the Phase I work.

G. Important Notices

Important Notice to Potential Applicants. The Institute of Education Sciences has the following award limits for grants:

Phase I limit -- \$100,000

Phase II limit -- \$750,000

The Institute is under no obligation to fund any specific application or make any specific number of awards in a given research priority area.

The Institute may elect to fund several or none of the proposed projects within a given priority area.

The Department is not responsible for any monies expended by an applicant before an award.

II. AGENCY CONTACTS

Direct questions about the IES SBIR to:

Joseph G. Teresa, Ph.D.

IES SBIR Program Coordinator
US Department of Education
Capitol Place - Room 608F
555 New Jersey Avenue, N.W.
Washington, D.C. 20208

Phone: (202) 219-2046

Email: joe.teresa@ed.gov

Direct questions pertaining to **human subjects research issues** to:

Helene Deramond

Coordinator, Protection of Human Subjects
Grants Policy Oversight Staff
U.S. Department of Education
Room 3652 – ROB3
7th and D Streets, SW
Washington, DC 20202-4248

Phone: (202) 260-5353

Email: helene.deramond@ed.gov

III. DEFINITIONS

The Small Business Administration (SBA) developed the following definitions relevant to the Small Business Innovation Research (SBIR) Program:

Applicant

The organizational entity that, at the time of award, will qualify as a Small Business Concern (SBC) and that submits a contract proposal or a grant application for a funding agreement under the SBIR Program.

Affiliate

This term has the same meaning as set forth in 13 CFR Part 121 - Small Business Size Regulations, §121.103.

Awardee

The SBC receiving an SBIR funding agreement.

Commercialization

The process of developing marketable products and/or services and producing and delivering products or services for sale (whether by the originating party or by others) to Government and/or commercial markets.

Essentially Equivalent Work

The "scientific overlap," which occurs when (1) substantially the same research is proposed for funding in more than one contract proposal or grant application submitted to the same Federal agency; (2) substantially the same research is submitted to two or more different Federal agencies for review and funding consideration; or (3) a specific research objective and the research design for accomplishing an objective are the same or closely related in two or more proposals or awards, regardless of the funding source.

Extramural Budget

The sum of the total obligations for R/R&D minus amounts obligated for R/R&D activities by employees of a Federal agency in or through Government-owned, Government-operated facilities.

Feasibility

The practical extent to which a project is capable of being successfully performed.

Funding Agreement

Any contract, grant, or cooperative agreement entered into between any Federal agency and any SBC for the performance of experimental, developmental, or research work, including products or services, funded in whole or in part by the Federal Government.

Historically Underutilized Business Zone (HUBZone)

An SBC meeting the following criteria:

1. Located in a "historically underutilized business zone" or HUBZone area located in one or more of the following:
 - a) A qualified census tract (as defined in section 42(d)(5)(C)(i)(I) of the Internal Revenue Code of 1986);
 - b) A qualified "non-metropolitan county" (as defined in section 143(k)(2)(B) of the Internal Revenue Code of 1986) with a median household income of less than 80 percent of the State median household income or with an unemployment rate of not less than 140 percent of the Statewide average, based on US Department of Labor recent data; or

- c) Lands within the boundaries of federally recognized Indian reservations.
2. Owned and controlled by one or more US Citizens; and
3. At least 35% of its employees must reside in a HUBZone.

Innovation

Something new or improved, having marketable potential, including (1) development of new technologies, (2) refinement of existing technologies, or (3) development of new applications for existing technologies.

Intellectual Property

The separate and distinct types of intangible property that are referred to collectively as "intellectual property," including but not limited to: patents, trademarks, copyrights, trade secrets, SBIR technical data (as defined in this section), ideas, designs, know-how, business, technical and research methods, and other types of intangible business assets, and including all types of intangible assets either proposed or generated by an SBC as a result of its participation in the SBIR Program.

Joint Venture

An association of persons or concerns with interests in any degree or proportion by way of contract, express or implied, consorting to engage in and carry out a single specific business venture for joint profit, for which purpose they combine their efforts, property, money, skill, or knowledge, but not on a continuing or permanent basis for conducting business generally. A joint venture is viewed as a business entity in determining power to control its management, has its own Employer Identification Number as assigned by the Internal Revenue Service, and is eligible under the SBIR Program provided that the entity created qualifies as a "SBC" as defined in this section.

Principal Investigator/Project Manager

The one individual designated by the applicant to provide the scientific and technical direction to the project that will be supported by the funding agreement.

Prototype

A model of something to be further developed, which includes designs, protocols, questionnaires, software, and devices.

Research or Research and Development (R/R&D)

Any activity that is:

1. A systematic, intensive study directed toward greater knowledge or understanding of the subject studied;
2. A systematic study directed specifically toward applying new knowledge to meet a recognized need; or
3. A systematic application of knowledge toward the production of useful materials, devices, and systems or methods, including design, development, and improvement of prototypes and new processes to meet specific requirements.

SBIR Technical Data

Means all data generated in the performance of any SBIR funding agreement.

SBIR Technical Data Rights

The rights an SBC obtains in data generated in the performance of any SBIR funding agreement that an awardee delivers to the Government during or upon completion of a Federally-funded project, and to which the Government receives a license.

Small Business Concern

A concern that, on the date of award for both Phase I and Phase II funding agreements:

1. is organized for profit, with a place of business located in the United States, which operates primarily within the United States or which makes a significant contribution to the United States economy through payment of taxes or use of American products, materials or labor;
2. is in the legal form of an individual proprietorship, partnership, limited liability company, corporation, joint venture, association, trust or cooperative, except that where the form is a joint venture (as defined in this section) there can be no more than 49 percent participation by foreign business entities in the joint venture;
3. is at least 51 percent owned and controlled by one or more individuals who are citizens of, or permanent resident aliens in, the United States; and
4. has, including its affiliates, not more than 500 employees.

Socially and Economically Disadvantaged Individual

A member of any of the following groups:

1. Black Americans;
2. Hispanic Americans;
3. Native Americans;
4. Asian Pacific Americans
5. Subcontinent Asian Americans;
6. Other groups designated from time to time by SBA to be socially disadvantaged; or any other individual found to be socially and economically disadvantaged by SBA pursuant to Section 8(a) of the Small Business Act, 15 U.S. C. 637(a).

Subcontract

Any agreement, other than one involving an employer/employee relationship, entered into by an awardee of a funding agreement calling for supplies or services required solely for the performance of the original funding agreement.

United States

Means the 50 states, the territories and possessions of the Federal Government, the Commonwealth of Puerto Rico, the District of Columbia, the Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau.

Woman-Owned Small Business Concern

A small business concern that is at least 51 percent owned and operated by a woman or women who also control and operate it. "Control" in this context means exercising the power to make policy decisions. "Operate" in this context means being actively involved in the day-to-day management.

IV. GRANT APPLICATION PREPARATION INSTRUCTIONS AND REQUIREMENTS

A. Application Requirements

An application to ED under the SBIR program should present a sound approach to the investigation of an important education or scientific question that is worthy of support under the stated criteria of this program announcement.

An application should be self-contained and written with the care and thoroughness accorded to papers for publication. The applicant should review the program announcement carefully to ensure that information and data essential for evaluation are included. The scientific and technical merit of the proposed research is the primary concern for all research supported by ED. *[NOTE: The number of points weighted to this area is contained below in the section on "Method of Selection and Evaluation Criteria."]*

The application's R/R&D must be responsive to the ED program objectives, but it should also serve as the base for technological innovation, new commercial products, processes or services that may benefit the public.

A firm must not propose market research, patent applications, or litigation. The research may be carried out through construction and evaluation of a laboratory prototype, where necessary.

Applications primarily for the development of proven concepts toward commercialization or for market research should not be submitted because such efforts are considered the responsibility of the private sector.

B. Protection of Information in Applications

It is ED policy to use information included in applications for evaluation purposes only and to protect such information from unauthorized use or disclosure. While this policy does not require that the application bear a notice, protection can be assured only to the extent that the **legend** specified below in "Rights in Data Developed Under SBIR Funding Agreements" is applied to those data that constitute trade secrets or to other commercial or financial information that is confidential or privileged. Other information may be afforded protection to the extent permitted by law, but ED assumes no liability for use and disclosure of information to which the legend has not been appropriately applied.

C. Limitations on Length of Application

This program announcement is designed to reduce the investment of time and money to small firms in preparing a formal application. Those who wish to respond should submit a SBIR Phase I application narrative of **no more than 25 pages**, *excluding* any documentation of prior multiple Phase II awards, if applicable; and required forms. In the interest of equity to all applicants, **all information must be in the 25 pages**. No appendix, other than the exclusion mentioned here, may be submitted and, if submitted, it will not be considered in the review of the application for scientific and technical merit. The Department will reject your application if it does not conform to the following requirements.

A “page” is 8.5” x 11”, on one side only, with 1” margins at the top, bottom, and both sides. Single space all text in the application narrative, including titles, headings, footnotes, quotations, references, and captions, as well as all text in charts, tables, figures, and graphs.

To ensure that the text is easy for reviewers to read and that all applicants have the same amount of available space in which to describe their projects, applicants must adhere to the type size and format specifications for the entire application narrative, including footnotes, or the application will be returned without review.

The application must conform to the following four requirements:

- The height of the letters must not be smaller than 12 point.
- Type density, including characters and spaces, must be no more than 15 characters per inch (cpi). For proportional spacing, the average for any representative section of text must not exceed 15 cpi.
- There must be no more than 6 lines of type within a vertical inch.
- Standard black type should be used to permit photocopying.

Applicants should check the type size using a standard device for measuring type size, rather than relying on the font selected for a particular word processing/prINTER combination. Figures, charts, tables, and figure legends may be smaller in size but must be readily legible. The type size used must conform to all four requirements. Small type size makes it difficult for reviewers to read the application; consequently, the use of small type will be grounds for the Institute to return the application without peer review. Adherence to type size and line spacing requirements is also necessary so that no applicant will have an unfair advantage, by using small type, or providing more text in their applications. **Note, these requirements apply to the PDF file as submitted.** As a practical matter, applicants who use a 12 point Times New Roman without compressing, kerning, condensing or other alterations typically meet these requirements.

Use only black and white in graphs, diagrams, tables, and charts. The application must contain only material that reproduces well when photocopied in black and white.

For the Project Narrative - Technical Content component, an application should indicate the number and text of each selection criterion followed by the narrative. An applicant should place a page number at the bottom right of each page beginning with 1; and number the pages consecutively throughout the document.

The 25-page limit does *not* apply to the ED 424 form, the one-page abstract, or the ED 524 form. Promotional and other discussion not related to the project is discouraged. The application must be primarily directed at research or R&D on the specific priority chosen.

D. Phase I Application Guidance

To avoid any misunderstanding, applicants should be aware that applications not satisfying all the required instructions will be returned to the proposing organization without review. Those applications may not be resubmitted with or without revision under this program announcement. All copies of the applications not accepted for evaluation will be returned.

1. **REQUIRED FORMS.** Complete all application forms included in the electronic application available at: <http://ies.constellagroup.com>. This includes:

- **ED Standard Form 424 (note the following)**
 - Item 5 – List the Principal Investigator or Project Director
 - Item 10 – This program is not subject to the requirements of Executive Order 12372, Intergovernmental Review of Federal Programs.)
 - Item 12 – If “Yes” then applicants must complete all components for the narrative statement related to “Protection of Human Subjects in Research.” Supplemental sections entitled “Exempt Research Narrative” and “Nonexempt Research Narrative” are provided in the electronic application to collect the information that is required.
 - Item 13 – List the Priority Number prior to the “Descriptive Title”

- **ED Budget Form 524**

Include any profit/fee in Line 10 (Indirect Costs). Only column “(a)” should be completed since the period of performance is for up to 6 months. The fee is not a “cost” and may be used by the small business concern for any purpose, including additional effort under the SBIR award. Therefore, the applicant should describe the request for profit/fee as a separate item in the narrative justification.

Other ED-Required Assurances and Certifications

Applicants need not submit the following assurances and certifications by the deadline as part of the electronic application process:

- SF 424B-Assurances-Non-Construction Programs
- ED-80-0013-Certification Regarding Lobbying, Debarment, Suspension and other Responsibility Matters; and Drug-Free Workplace Requirements
- ED 80-0014 (if applicable) - Lower Tier Certification
- SF-LLL (if applicable) - Disclosure of Lobbying Activities

However, applicants **will be required to complete and submit** these forms before a grant award is issued.

2. **PROJECT NARRATIVE – ABSTRACT, CERTIFICATIONS, STATEMENTS, AND LEGEND**

- a) **ABSTRACT.** The applicant should provide an abstract with the following two components. Nothing in this section should be proprietary or confidential.
- (1) **Technical Abstract** of no more than 200 words.
 - (2) **Summary of Anticipated Results and Potential Commercial Applications** of the research (for both Phases I and II).

- b) **CERTIFICATIONS.** The applicant should respond to the following certifications required by the Small Business Administration.

Small Business Certification --

Does the applicant certify that it is a SBC and meets the definition as stated in the program announcement or that it will meet that definition at the time of award?

☐ Yes ☐ No

[NOTE: The next three (3) items are for statistical purposes only.]

Socially and Economically Disadvantaged SBC Certification --

Does the applicant qualify as a socially and economically disadvantaged SBC and meet the definition as stated in this program announcement?

☐ Yes ☐ No

Woman-owned SBC Certification --

Does the applicant qualify as a woman-owned SBC and meet the definition as stated in this program announcement?

☐ Yes ☐ No

HUBZone-owned SBC Certification --

Does the applicant qualify as a HUBZone-owned SBC and meet the definition as stated in this solicitation?

☐ Yes ☐ No

The website listed below contains information about the SBA's HUBZone program:

<http://www.sba.gov/hubzone/>

- c) **STATEMENTS.** The applicant should respond to the following statements required by the Small Business Administration.

Duplicate Research Statement --

Has the applicant and/or Principal Investigator submitted applications/proposals for essentially equivalent work under other Federal program announcements or received other Federal awards for essentially equivalent work?

☐ Yes ☐ No

If yes, identify applications/proposals and/or awards in "Project Narrative – RELATED APPLICATION(S) OR AWARD(S)."

Disclosure Permission Statement --

Will the applicant permit the Government to disclose the title and technical abstract page of the proposed project, plus the name, address, and telephone number of the corporate official of the applicant's firm, if the application does not result in an award, to concerns that may be interested in contacting you for further information?

☐ Yes ☐ No

- d) **LEGEND FOR PROPRIETARY INFORMATION.** Information contained in unsuccessful applications will remain the property of the applicant. The Government may, however, retain copies of all applications. Public release of information in any application submitted will be subject to existing statutory and regulatory requirements.

If proprietary information provided by an applicant in an application constitutes a trade secret, proprietary commercial or financial information, confidential personal information, or data affecting the national security, it will be treated in confidence, to the extent permitted by law. This information **must** be clearly marked by the applicant with the term **"confidential proprietary information"** and the following **legend must** appear in this section of the application:

"These data shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed in whole or in part for any purpose other than evaluation of this application. If a funding agreement is awarded to this applicant as a result of or in connection with the submission of these data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the funding agreement and pursuant to applicable law. This restriction does not limit the Government's right to use information contained in the data if it is obtained from another source without restriction. The data subject to this restriction are contained in pages _____ of this application."

Any other legend may be unacceptable to the Government and may constitute grounds for removing the application from further consideration, without assuming any liability for inadvertent disclosure. The Government will limit dissemination of such information to/within official channels.

3. **PROJECT NARRATIVE – TECHNICAL CONTENT**

The subcategories of this section directly correspond to the "Review Criteria" listed in this Program Announcement.

a) **Significance:**

- i) Identification and Significance of the Problem or Opportunity. Make a clear statement of the specific research problem or opportunity addressed and why it is important.
- ii) Related Research or R&D. Describe significant research or R&D that is directly related to the application, including any conducted by the principal investigator or by the applicant's firm. Describe how it relates to the proposed effort, and describe any planned coordination with outside sources. The purpose of this section is to persuade reviewers of the applicant's awareness of key recent developments in the specific priority area.
- iii) Potential Commercial Applications/Anticipated Societal Benefits. Briefly describe whether and by what means the proposed research also appears to have potential commercial application(s) and/or societal benefit(s). Also describe briefly whether and by what means the proposed project appears to have potential use by the Federal Government (if, in fact, it does).

b) **Quality of the Project Design:**

- i) Phase I Technical Objectives. State the specific objectives of the Phase I research or R&D effort, including the technical questions it will try to answer to determine the feasibility of the proposed approach.

- ii) Relationship with Future R&D. Discuss the significance of the Phase I effort in providing a foundation for the Phase II R&D effort. Also state the anticipated results of the proposed approach if Phases I and II of the project are successful.
- iii) Phase I Work Plan. Include a detailed description of the Phase I research or R&D plan. The plan should indicate not only what will be done, but how the R&D will be carried out. Phase I research or R&D should address the objectives and the questions cited in 3 (b)(i) above. The methods planned to achieve each objective or task should be discussed in detail. **THE “WORK PLAN” SHOULD BE AT LEAST ONE-THIRD OF THE APPLICATION.**
- iv) Human Subjects in Research. **If applicable**, include a brief narrative of human subject involvement. Projects involving research on human subjects will require grantee compliance with the Department of Education’s Protection of Human Subjects Regulations, 34 CFR Part 97. Copies of the Department of Education’s regulations for the Protection of Human Subjects are available from:
Grants Policy and Oversight Staff (GPOS)
Office of the Chief Financial Officer
Washington, DC 20202-4248
(202) 708-8263

This information is also available on the ED website at:

<http://www.ed.gov/about/offices/list/ocfo/humansub.html>

For a quick overview, see in particular “Information About the Protection of Human Subjects in Research Supported by the Department -- Overview.”

Please give thorough consideration for the need of any human subject involvement in the Phase I feasibility work. All human subjects in research issues **MUST** be resolved prior to a grant award.

Unless all the proposed human subjects research meets one or more of the regulation’s exemptions, awardees involving human subjects will be requested to file an “Assurance of Compliance with the Regulations” and have the project’s research protocol reviewed and approved by an Institutional Review Board (IRB). The costs related to obtaining required Institutional Review Board reviews can be included as a direct cost, provided the costs are necessary and reasonable.

YOU DO NOT NEED AN ASSURANCE OR IRB APPROVAL AS A CONDITION OF APPLYING FOR THIS AWARD.

- v. Protection of Pupil Rights Amendment (PPRA). This grant is subject to the Protection of Pupil Rights Amendment (PPRA), 20 U.S.C. 1232h, 34 CFR Part 98. PPRA is a law that governs the administration of certain Department-funded surveys. The law provides that a school district must obtain the prior written consent of a parent if the district “requires” a student to take a survey, i.e., the survey is not voluntary. In addition, the PPRA only applies to a survey if the survey asks certain types of questions (e.g., questions that reveal information about illegal behavior, psychological problems potentially embarrassing to the student, or sex behavior and attitudes). Grantees should be aware of the requirements of PPRA if they plan to use Departmental funds to develop surveys for elementary or secondary school students.

For additional information or technical assistance, you may call (202) 260-3887 (voice). Individuals who use TDD may call the Federal Information Relay Service at 1-800-877-8339. Or you may contact us at the following address:

Family Policy Compliance Office -- U.S. Department of Education
400 Maryland Avenue, SW -- Washington, D.C. 20202-4605

Information is also available on the ED website at:

<http://www.ed.gov/policy/gen/guid/fpc/index.html>

c) **Quality of Project Personnel:**

- i) Key Personnel and Bibliography of Directly Related Work. Identify key personnel involved in Phase I, including their education and directly related experience, or writings. Where vitae are extensive, summaries that focus on the most relevant experience or publications are desired. Such summaries may be necessary to meet the application size limitation. Also list all other commitments that senior personnel have during the proposed period of performance.
- ii) Consultants. Involvement of consultants in the planning and research stages of the project is permitted. If such involvement is intended, it should be described in detail. *[NOTE: See "Considerations" section for "Subcontracting Limits."]*

d) **Adequacy of Resources:**

- i. Facilities and Equipment:
The conduct of advanced research may require the use of sophisticated instrumentation or computer facilities. The applicant should provide a detailed description of the availability and location of the facilities and equipment necessary to carry out Phase I.
- ii. Budget:
Use Budget Summary form (ED Form 524) to present a complete budget summary for the proposed project dates.

Please provide a justification for this budget by including a detailed narrative description for each budget line item.

The SBA has stated that SBIR funding agencies are to provide for a **reasonable** fee or profit on SBIR funding agreements, including grants, **consistent with normal profit margins provided to profit-making firms for R/R&D work** (SBIR "Policy Directive").

4. **PROJECT NARRATIVE – RELATED APPLICATION(S) OR AWARD(S).**

If an applicant elects to submit identical applications or applications containing a significant amount of essentially equivalent work under other Federal program announcements, **a statement must be included** in this application indicating:

- a) The name and address of agencies to which application(s) was/were submitted or from which SBIR award(s) was/were received.
- b) The date(s) of application submission and date(s) of award.
- c) The title, number and date of SBIR program announcement under which application(s) was/were submitted or award(s) received.
- d) The applicable research priority in the program announcement for each SBIR application submitted or award received.
- e) The titles of research projects.

- f) The name and title of the principal investigator for each application submitted or award received.

WARNING

While it is permissible, with application notification, to submit identical or essentially equivalent applications for consideration under numerous Federal program announcements, it is unlawful to enter into funding agreements requiring essentially equivalent effort. If there is any question concerning this it must be disclosed to the soliciting agency or agencies before award.

5. **PROJECT NARRATIVE – DOCUMENTATION OF MULTIPLE PHASE II AWARDS.** A small business concern that submits a Phase I application and has received more than 15 Phase II SBIR awards, as totaled from all Federal agencies with SBIR programs, during the preceding 5 fiscal years, **must** submit the following information for each Phase II award:

- the name of the awarding agency,
- the date of the award,
- the funding agreement number and award amount,
- the priority/topic or subtitle,
- the amount of the follow-on funding commitment, the source and the date of the commitment, and the current commercialization status.

*[This required information may be included as an appendix and **will not be** counted toward the application limitation of 25 pages.]*

V. METHOD OF SELECTION AND EVALUATION CRITERIA

A. Introduction

Phase I applications will be judged on a competitive basis.

1. All applications will be **screened** to confirm that the required instructions were completed. Those applications not satisfying all the required instructions will be returned to the proposing organization without review.
2. Persons who are experts in the priority areas will evaluate applications meeting those requirements. Each application will be judged on its own merit, according to the review criteria described below.

The Department of Education will make awards based upon these evaluation criteria and the availability of funds. In the evaluation and handling of applications, the Department will make every effort to protect the confidentiality of the application and any evaluations.

B. Evaluation Criteria for Phase I

The following evaluation criteria will be used to evaluate applications for new grants under this competition. The criteria below will receive the following weights. The maximum score for all of these criteria is 100 points. The weight for each criterion is indicated in parentheses. The Department of Education will make awards based upon these evaluation criteria and the availability of funds.

- | | |
|----------------------------------|-------------|
| 1. Significance | (25 points) |
| 2. Quality of the Project Design | (50 points) |
| 3. Quality of Project Personnel | (15 points) |
| 4. Adequacy of Resources | (10 points) |

C. Release of Grant Application Review Information

After final award decisions are made the Principal Investigator will be sent the technical evaluations. No one other than the Principal Investigator (and appropriate ED staff) may receive the technical evaluations.

Applicants normally receive their evaluations within six to eight weeks following the announcement of the awards. The identity of the reviewers will not be disclosed.

D. Evaluation Criteria for Phase II

ED will send detailed instructions regarding Phase II application submission to the eligible winners of its Phase I awards.

Phase II application evaluations may include on-site evaluations of the Phase I effort.

VI. CONSIDERATIONS

A. Reports

A final Phase I “Performance Report” **must** be submitted to Education Program Contact upon completion of the Phase I work. The report should identify the purpose of the research, and include a brief description of the research carried out, the research findings or results, and the potential applications of the research. **This project summary is to be submitted without restriction on publication and may be published by ED.** The performance report should include performance and financial expenditure information as required by the awarding Program Office.

B. Government Performance and Results Act

The Government Performance and Results Act (GPRA) of 1993 places new management expectations and requirements on Federal departments and agencies by creating a framework for more effective planning, budgeting, program evaluation, and fiscal accountability for Federal programs. The intent of the Act is to improve public confidence by holding departments and agencies accountable for achieving program results. Departments and agencies should clearly describe the goals and objectives of their programs, identify resources and actions needed to accomplish these goals and objectives, develop a means of measuring progress made, and regularly report on their achievement.

The purpose of the SBIR program is to stimulate technological innovation in the private sector, strengthen the role of small business in meeting Department of Education research or research and development (R/R&D) needs, increase the commercial application of ED-supported research results, and improve the return on investment from Federally-funded research for economic and social benefits to the Nation. Grantees are required to report on the progress of their work throughout the award period and submit final reports to the U.S. Department of Education.

C. Innovations, Inventions and Patents

1. **Rights in Data Developed Under SBIR Funding Agreements**

To preserve the SBIR data rights of the awardee, the Legend (or statements) used in the SBIR Data Rights clause included in the SBIR award must be affixed to any submissions of technical data developed under that SBIR award. If no Data Rights clause is included in the SBIR award, the following legend, at a minimum, should be affixed to any data submissions under that award.

LEGEND

These SBIR data are furnished with SBIR rights under Funding Agreement No. _____ (and subcontract No. _____ if appropriate), Awardee Name _____, Address, Expiration Period of SBIR Data Rights _____. The Government may not use, modify, reproduce, release, perform, display, or disclose technical data or computer software marked with this legend for (choose four (4) or five (5) years). After expiration of the (4- or 5-year period), the Government has a royalty-free license to use, and to authorize others to use on its behalf, these data for Government purposes, and is relieved of all disclosure prohibitions and assumes no liability for unauthorized use of these data by third parties, except that any such data that is also protected and referenced under a subsequent SBIR award shall remain protected through the protection period of that subsequent SBIR award. Reproductions of these data or software must include this legend.”

2. Copyrights

With prior written permission of the Education Program Contact, the awardee normally may copyright and publish (consistent with appropriate national security considerations, if any) material developed with ED support. The Department of Education receives a royalty-free license for the Federal Government and requires that each publication contain an appropriate acknowledgment and disclaimer statement.

3. Patents

Small business firms normally may retain the principal worldwide patent rights to any invention developed with Government support. The Government receives a royalty-free license for Federal Government use, reserves the right to require the patent holder to license others in certain circumstances, and requires that anyone exclusively licensed to sell the invention in the United States must normally manufacture it domestically. To the extent authorized by 35 U.S.C. 205, the Government will not make public any information disclosing a Government-supported invention for a 4 year period (that may be extended by subsequent SBIR funding agreements) to allow the awardee a reasonable time to pursue a patent.

D. Subcontracting Limits – Research and Analytical Work

For **Phase I**, at least **two-thirds** of the research and/or analytic effort must be performed by the proposing small business concern unless otherwise approved in writing by the funding agreement officer after consultation with the agency SBIR Program Manager/Coordinator.

For **Phase II**, at least **one-half** of the research and/or analytic effort must be performed by the proposing small business concern unless otherwise approved in writing by the funding agreement officer after consultation with the agency SBIR Program Manager/Coordinator.

E. Joint Ventures or Limited Partnerships

Joint ventures and limited partnerships are permitted provided that the entity created qualifies as a small business concern as defined in this program announcement.

F. Cost-Sharing

Cost-sharing is permitted for applications under this program announcement; however, cost sharing is not required. Cost-sharing will not be an evaluation factor in consideration of your Phase I application.

G. Profit/Fee

Both Phase I and Phase II grants may include a reasonable fee or profit on SBIR funding agreements, consistent with normal profit margins provided to profit-making firms for R/R&D work.

H. American Made Equipment and Products

When purchasing equipment or a product under the SBIR funding agreement, purchase only American-made items whenever possible.

I. Standard Terms and Conditions

Upon acceptance of an award, the grantee must comply with the terms and conditions contained or referenced in the Notice of Award document. These terms and conditions, constituting legal requirements, are imposed on an awardee by statute, regulations, administrative policy, or the award document itself.

J. Additional Information

1. This program announcement is intended for informational purposes and reflects current planning. If there is an inconsistency between the information contained herein and the terms of any resulting SBIR funding agreement, then the terms of the funding agreement are controlling.
2. In the interests of those with special needs, the applicant is encouraged to develop products that include alternate formats (e.g., closed- or open-captioning for films and/or videotapes, Braille, large print, audiotape).
3. The SBIR program is not a substitute for existing unsolicited application mechanisms. The Government shall not accept unsolicited applications under the SBIR program in either Phase I or Phase II.
4. If an award is made pursuant to an application submitted under this program announcement, the grantee will be required to certify that he or she has not previously been, nor is currently being, paid for essentially equivalent work by any agency of the Federal Government.

VII. APPLICATION SUBMITTAL INFORMATION

The Government Paperwork Elimination Act (GPEA) of 1998, (Pub. L. 105-277) and the Federal Financial Assistance Management Improvement Act of 1999, (Pub. L. 106-107) encourage us to undertake initiatives to improve our grant processes. Enhancing the ability of individuals and entities to conduct business with us electronically is a major part of our response to these Acts. Therefore, we are taking steps to adopt the Internet as our chief means of conducting transactions in order to improve services to our customers and to simplify and expedite our business processes.

We are requiring that applications to the Institute of Education Sciences' FY 2004 SBIR Phase I competition be submitted electronically to the following web site:

<https://ies.constellagroup.com/>

The forms you must submit, together with the requirements for the content of an application and the information on the software to be used, will be available at this web site on or around January 12, 2004. Required forms can be viewed prior to January at the following ED web site:

<http://www.ed.gov/fund/grant/apply/appforms/appforms.html>

To answer questions regarding the electronic submission, the **Constella Help Desk** is available and may be reached by filling out the information on the following link (<https://ies.constellagroup.com/index.cfm?fuseaction=helpdesk.helpmain>).

The Constella Help Desk is also available via telephone (301-493-0006). The Help Desk's hours are Monday through Friday from 9 a.m. to 5 p.m. EST. Please note that these hours will be extended the week applications are due. All inquiries will be answered within 1 business day.

The deadline for transmittal of applications is: 8 p.m. Eastern time, February 19, 2004. Details about the submission process will be specified in the electronic application available at:

<https://ies.constellagroup.com/>

- **Required Forms.** You must submit all documents electronically, including the Application for Federal Education Assistance (ED 424), Budget Information--Non-Construction Programs (ED 524), and all necessary assurances and certifications as indicated above under IV. D 1 and 2.
- **PR/Award Number.** After you electronically submit your application, you will receive a confirmation email stating that the application was successfully submitted.

Deadline. On the deadline date, the deadline time for transmitting applications is **8:00 p.m., Eastern time.**

VIII. PRIORITIES

For fiscal year 2004, the Department of Education, Institute of Education Sciences has selected 2 priorities for the SBIR program. The first priority concerns the development of effective business consulting services that can better serve the education community at both the local and state levels. The second consists of the development of empirically derived products in the areas of reading or mathematics or science or character/pro-social development from pre-kindergarten through post-secondary, including products that support teachers and administrators as well as products that are used directly by students

Successful applicants will be expected to collect some empirical evidence as to the effectiveness of the service or product they are proposing or, at a minimum, incorporate a plan for measuring its efficacy and usefulness.

A. PRIORITY 1 -- Services **Awards up to \$100,000**

This priority supports research to develop effective business consulting *services* that can better serve the education community at both the local and state levels. The Institute of Education Sciences SBIR Program invites proposals that seek to develop a plan or a business model for the provision of such services. Examples of relevant services include, but are not limited to, the following:

1. Education Data Management – There is a need to provide schools, districts and States with more effective data management tools that support their efforts to meet the standards set forth in the *No Child Left Behind Act* of 2001 (NCLB). An example would be an application or service designed to provide a particular school, a group of schools, or a local district with test results that have been condensed into readable and easily interpretable language for teacher and principal use. This service might also include the development of classroom profiles depicting students' performance and providing recommendations on courses of action to be taken in order to enhance student achievement.
2. Evidence-Driven Consulting Services – Superintendents, principals and teachers could benefit from technical assistance in applying empirically based studies about a particular content area (e.g., reading, mathematics, science) to the local context. In addition, schools that are having trouble meeting the requirements of NCLB could benefit from consulting services designed to provide them with a menu of options and strategies they could implement in order to enhance student learning and achievement.
3. Financial Data Services at the School, District or State Level – These services might include the further development of existing financial software and/or the evaluation of existing commercial software to determine which product best meets the need of the school, district or state systems. Applicants are encouraged to consult the background section of the Education Finance, Leadership, and Management program announcement for a more detailed description of the limitations the Institute sees in existing financial software. This program announcement can be accessed at: <http://www.ed.gov/programs/edresearch/applicant.html>.
4. Technology Consulting Services – These services might focus on assisting schools with the selection and implementation of relevant educational technologies and most importantly, on training teachers and other relevant school personnel on how to make most effective use of these new technologies.

B. PRIORITY 2 -- Products
Awards up to \$100,000

This priority supports the development of empirically derived educational products in the areas of reading or mathematics or science or character/pro-social development at the pre-kindergarten through post-secondary levels, including products that support teachers and administrators as well as products that are used directly by students. Applicants are encouraged to consult the background section of the individual announcements for other Institute grant competitions in the topic areas listed above to better understand the thinking behind this priority. All relevant announcements can be accessed at: <http://www.ed.gov/programs/edresearch/applicant.html>.

Products may include, but are not limited to, the following:

1. Software Applications
2. Supplemental Educational Materials (i.e., workbooks, readers and professional development materials)
3. Assessment instruments

IX. SCIENTIFIC AND TECHNICAL INFORMATION SOURCES

Certain sources can provide information that can be useful in preparing SBIR applications. The Internet sites listed below can provide you with helpful material and links to other sites.

SBIR Program-Related

ED SBIR Program: <http://www.ed.gov/programs/sbir/index.html>

SBIR State Support Entities: http://www.ed.gov/programs/sbir/state_awards.html

Small Business Administration (SBA)
Office of Technology (SBIR): www.sba.gov/sbir/

Small Business Administration (SBA)
Technical Resources Network (TECH-Net): tech-net.sba.gov/

Institute of Education Sciences (IES)

IES Home Page: <http://www.ed.gov/about/offices/list/ies/index.html>

IES Funding Opportunities: <http://www.ed.gov/programs/edresearch/applicant.html>

General

U.S. Department of Education: <http://www.ed.gov/>

No Child Left Behind Act of 2001: <http://www.ed.gov/nclb/overview/intro/edpicks.jhtml?src=ln>

Administrative Regulations (EDGAR): <http://www.ed.gov/policy/fund/reg/edgarReg/edgar.html>

Funding Opportunities: <http://www.ed.gov/fund/grant/find/edlite-forecast.html>

Educational Resources Information Center (ERIC):
<http://www.ed.gov/about/offices/list/ies/ncee/eric.html>

X. GRANT APPLICATION PACKAGE CHECKLIST
CLOSING DATE: February 19, 2004

CHECK:

- ☐ Have you prepared the application according to the instructions set forth above under the section entitled "Limitations on Length of Application"?
- ☐ Does the application contain **no more than 25 pages, *excluding*** any documentation of prior multiple Phase II awards, if applicable; and, required forms?
- ☐ Has the **electronic version of the ED Standard Form 424** been completed according to the instructions?
- ☐ Are issues (and, if applicable, exemptions) relating to **Research Activities Involving Human Subjects** adequately addressed in the electronic version of the **ED Standard Form 424**?
- ☐ Has the electronic version of the **Budget Summary Form (ED Form 524)** been completed according to the instructions?
- ☐ Have you included all the required components of the "**Project Narrative -- ABSTRACT**" section?
 - Abstracts;
 - Certifications;
 - Statements; and,
 - Legend
- ☐ Have you addressed each of the components of the "**Project Narrative – TECHNICAL CONTENT**" section? Including –
 - Significance;
 - Quality of Project Design;
 - Quality of Project Personnel; and,
 - Adequacy of Resources
- ☐ Is the Phase I "Work Plan" at least one-third of the application?
- ☐ Have you provided notification of "**Related Application(s) or Award(s)**" in the application narrative, if applicable?
- ☐ Have you provided notification of "**Documentation of Multiple Phase II Awards**" in the appendix, if applicable?